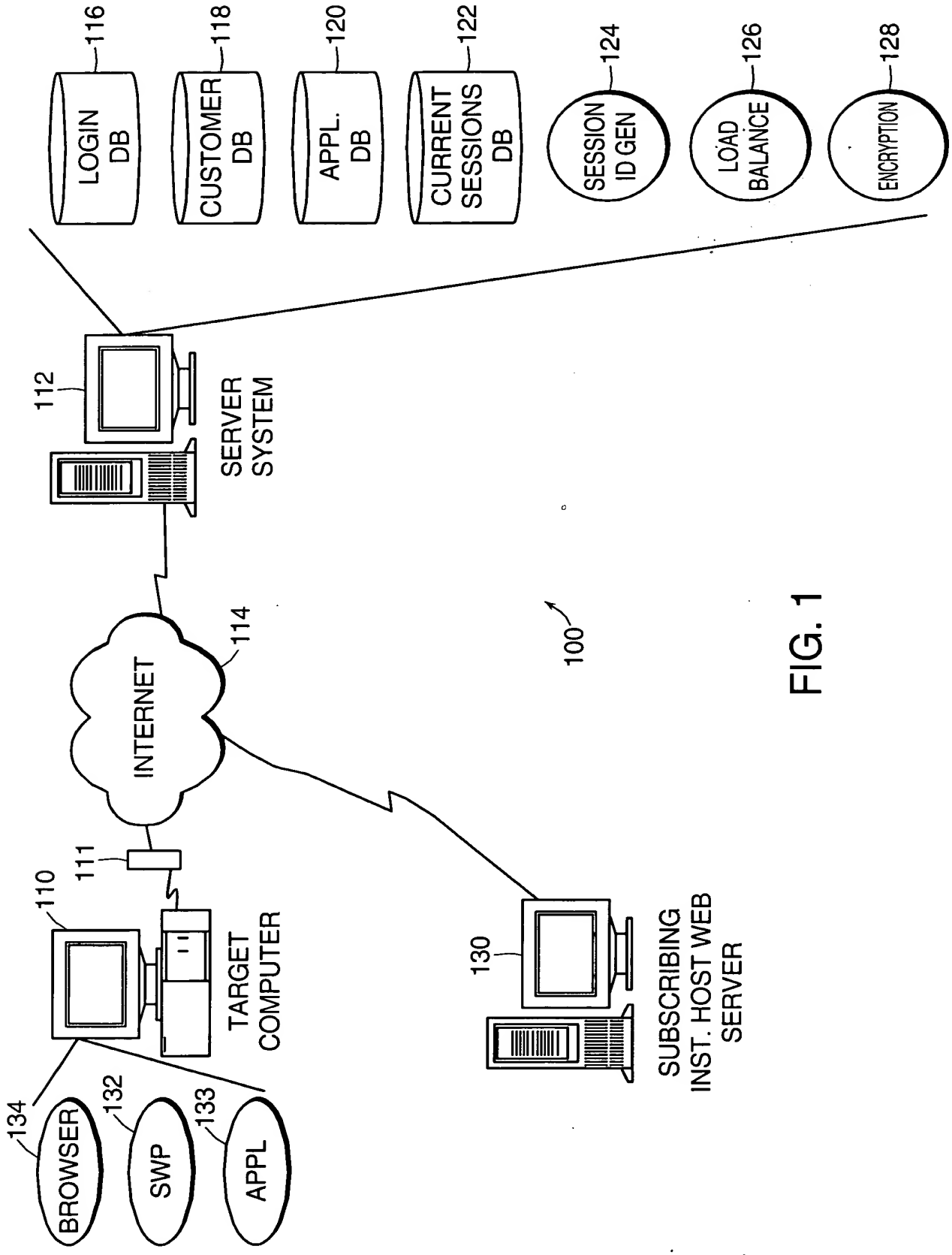

LOGIN DB
116
CUSTOMER DB
118
APPL. DB
120
CURRENT SESSIONS DB
122
SESSION ID GEN
124
LOAD BALANCE
126
ENCRYPTION
128
112
SERVER SYSTEM
INTERNET
114
100
111
110
TARGET COMPUTER
130
SUBSCRIBING INST. HOST WEB SERVER
134
BROWSER
132
SWP
133
APPL

FIG. 1

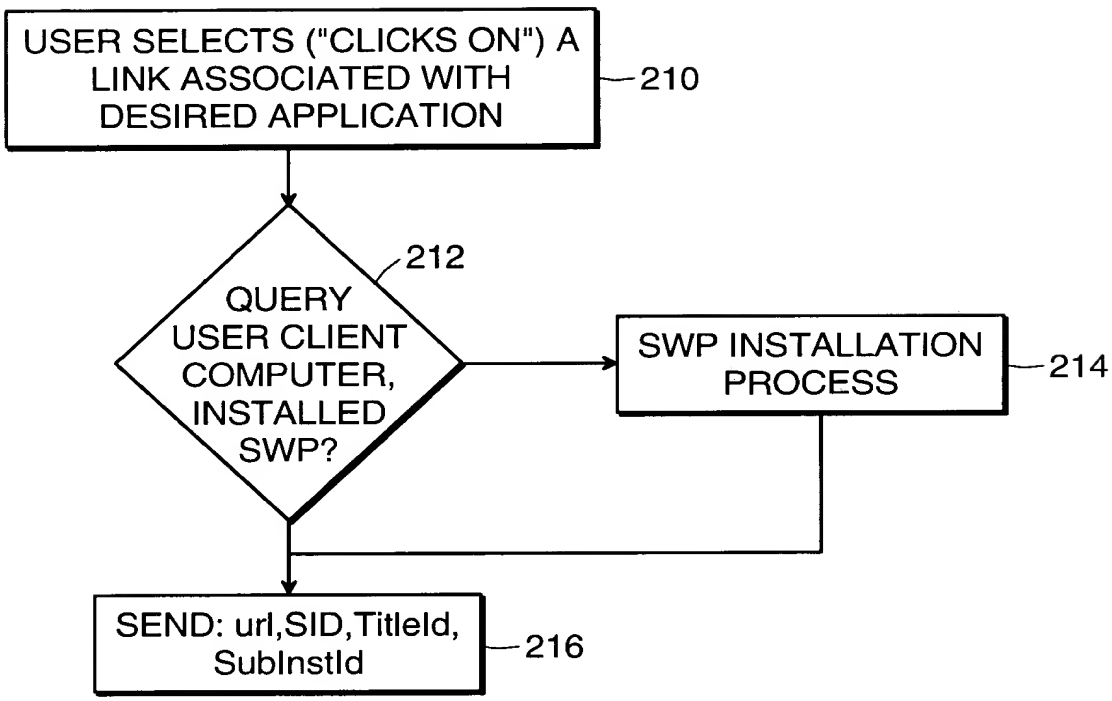

USER SELECTS ("CLICKS ON") A LINK ASSOCIATED WITH DESIRED APPLICATION
210
QUERY USER CLIENT COMPUTER, INSTALLED SWP?
212
SWP INSTALLATION PROCESS
214
SEND: url,SID,TitleId, SubInstId
216

FIG. 2

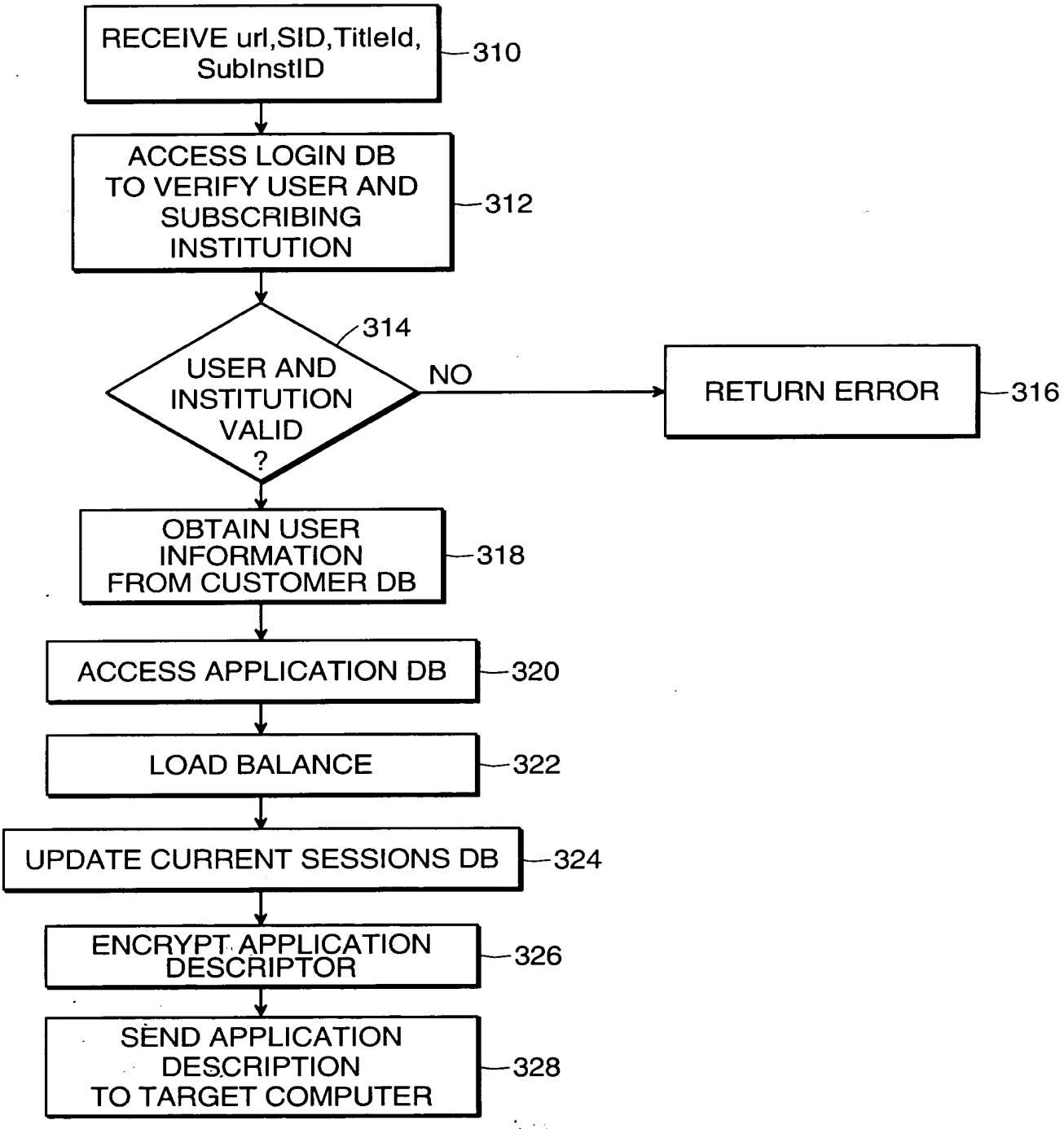

RECEIVE url,SID,TitleId, SubInstID
310
ACCESS LOGIN DB TO VERIFY USER AND SUBSCRIBING INSTITUTION
312
314
USER AND INSTITUTION VALID ?
NO
RETURN ERROR
316
OBTAIN USER INFORMATION FROM CUSTOMER DB
318
ACCESS APPLICATION DB
320
LOAD BALANCE
322
UPDATE CURRENT SESSIONS DB
324
ENCRYPT APPLICATION DESCRIPTOR
326
SEND APPLICATION DESCRIPTION TO TARGET COMPUTER
328

FIG. 3

CLIENT LAUNCH PROCESS

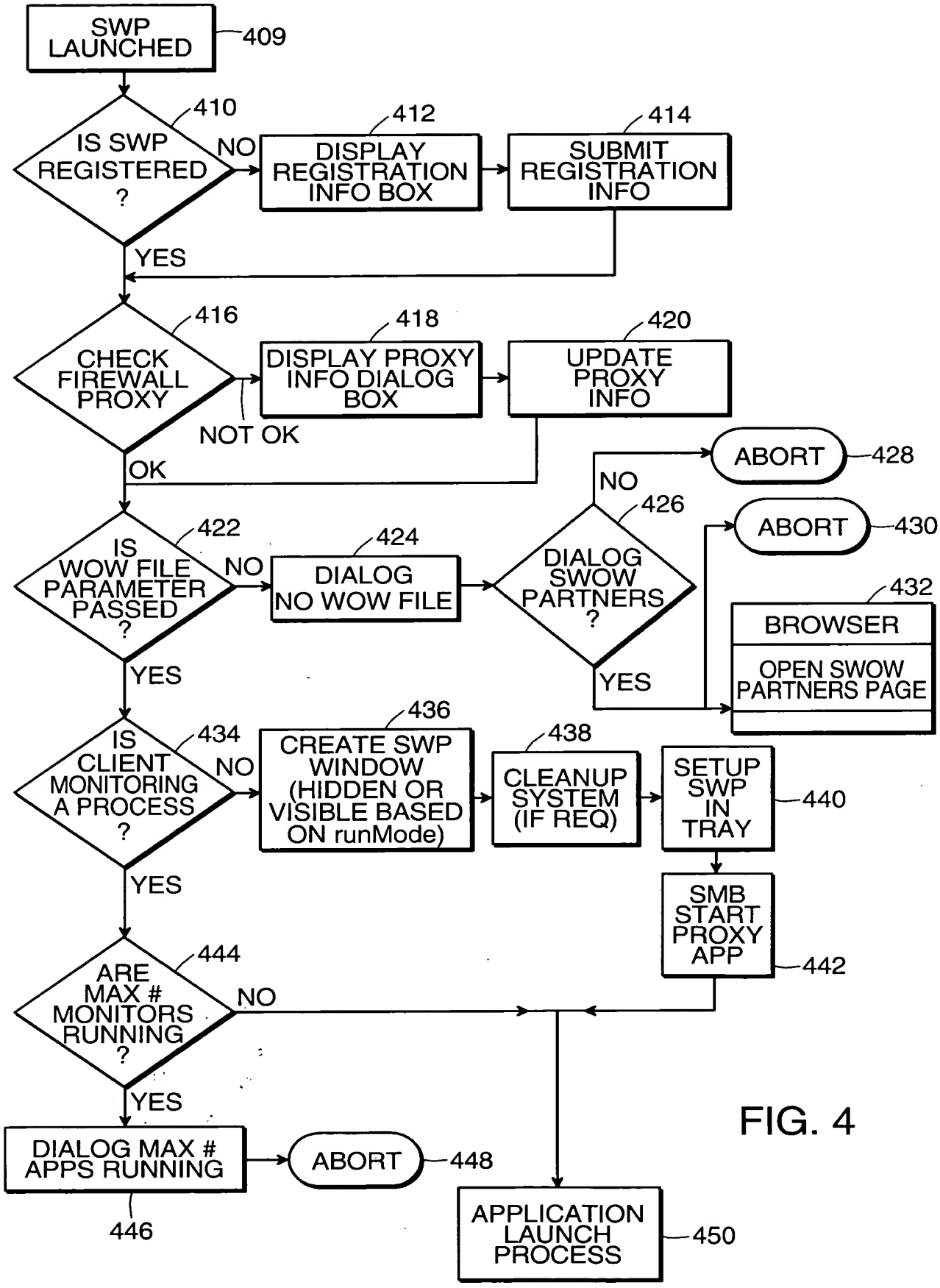
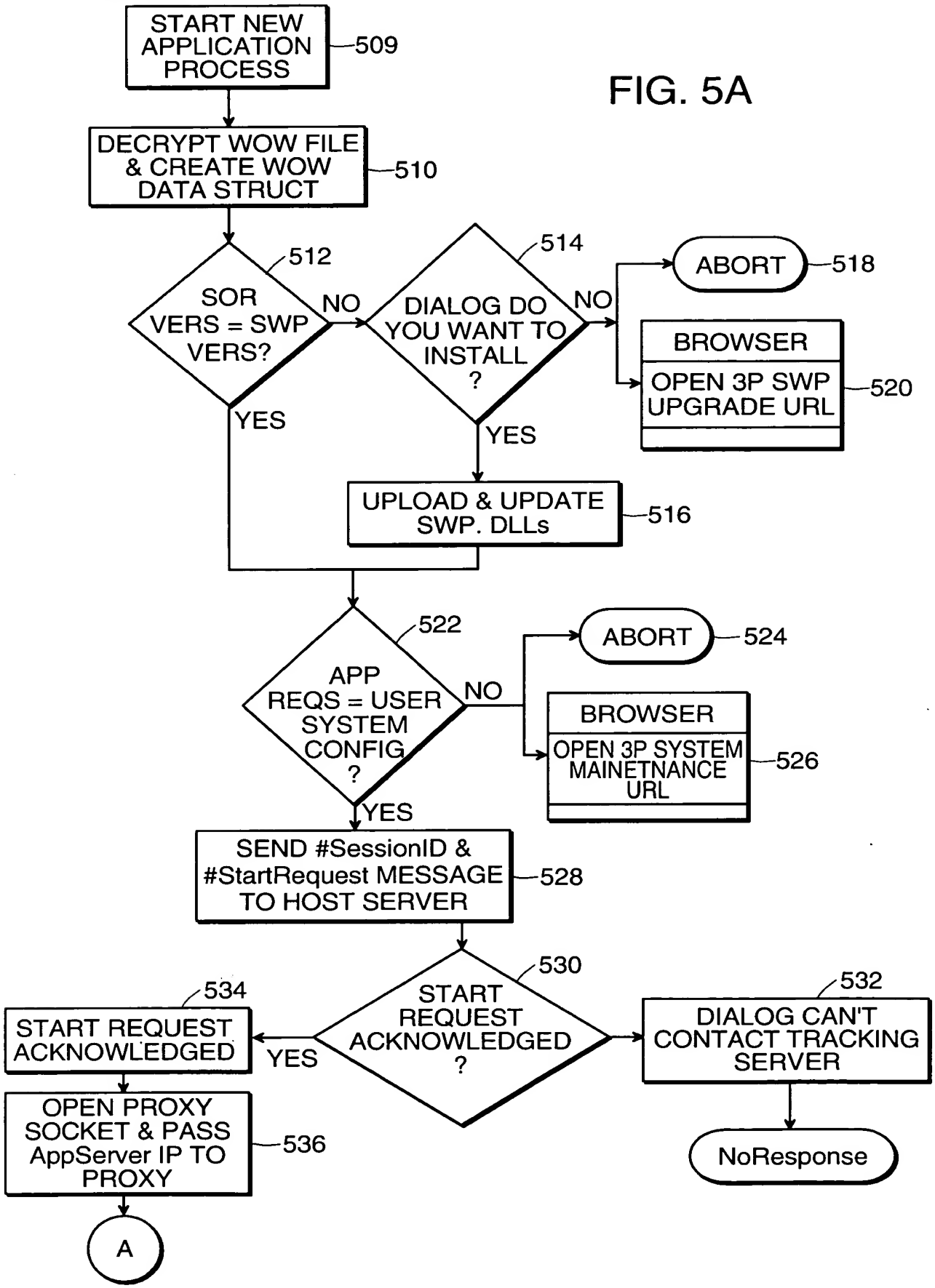


FIG. 4

APPLICATION LAUNCH PROCESS (1/2)

FIG. 5A



APPLICATION LAUNCH PROCESS (2/2)

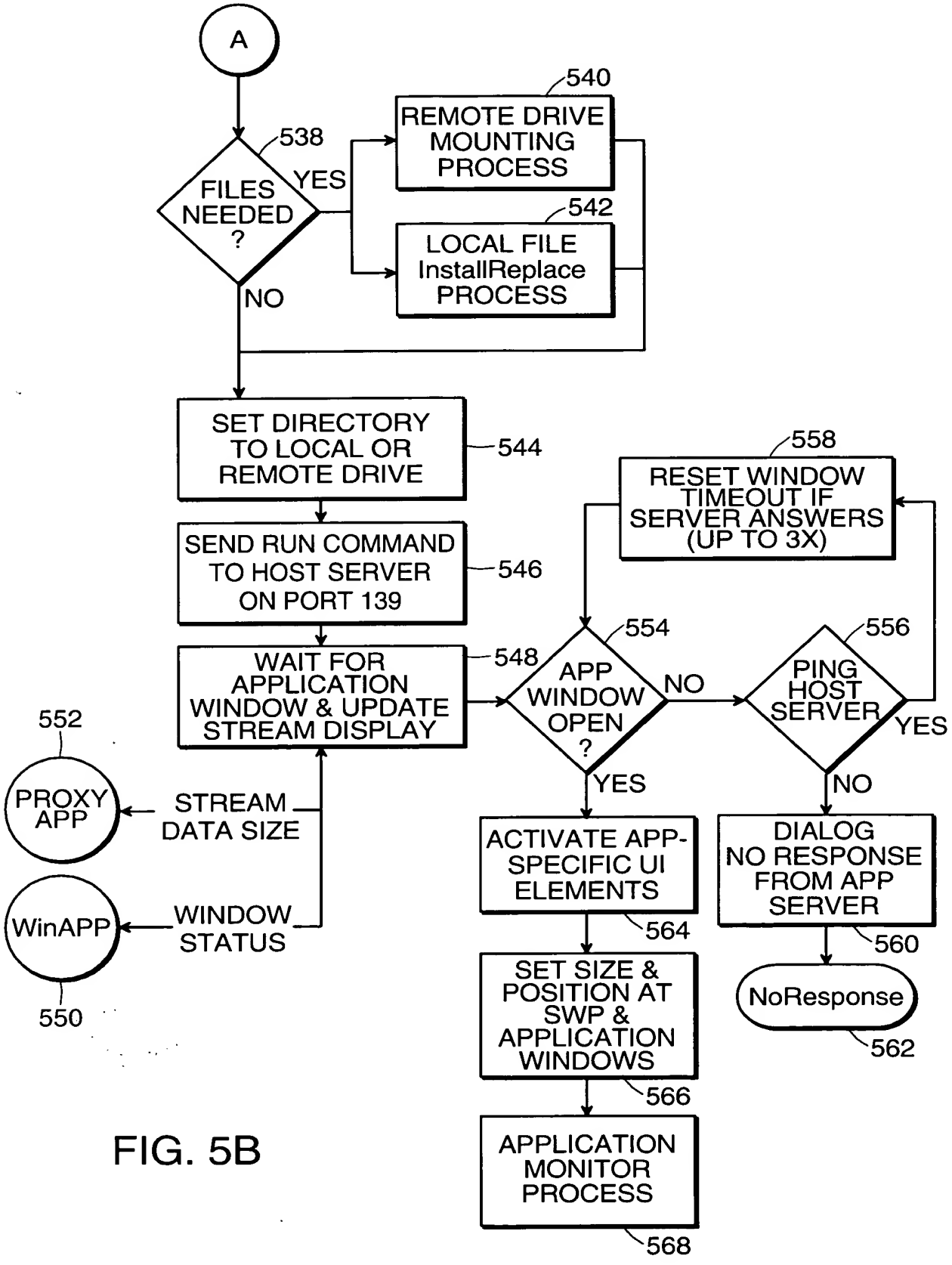


FIG. 5B

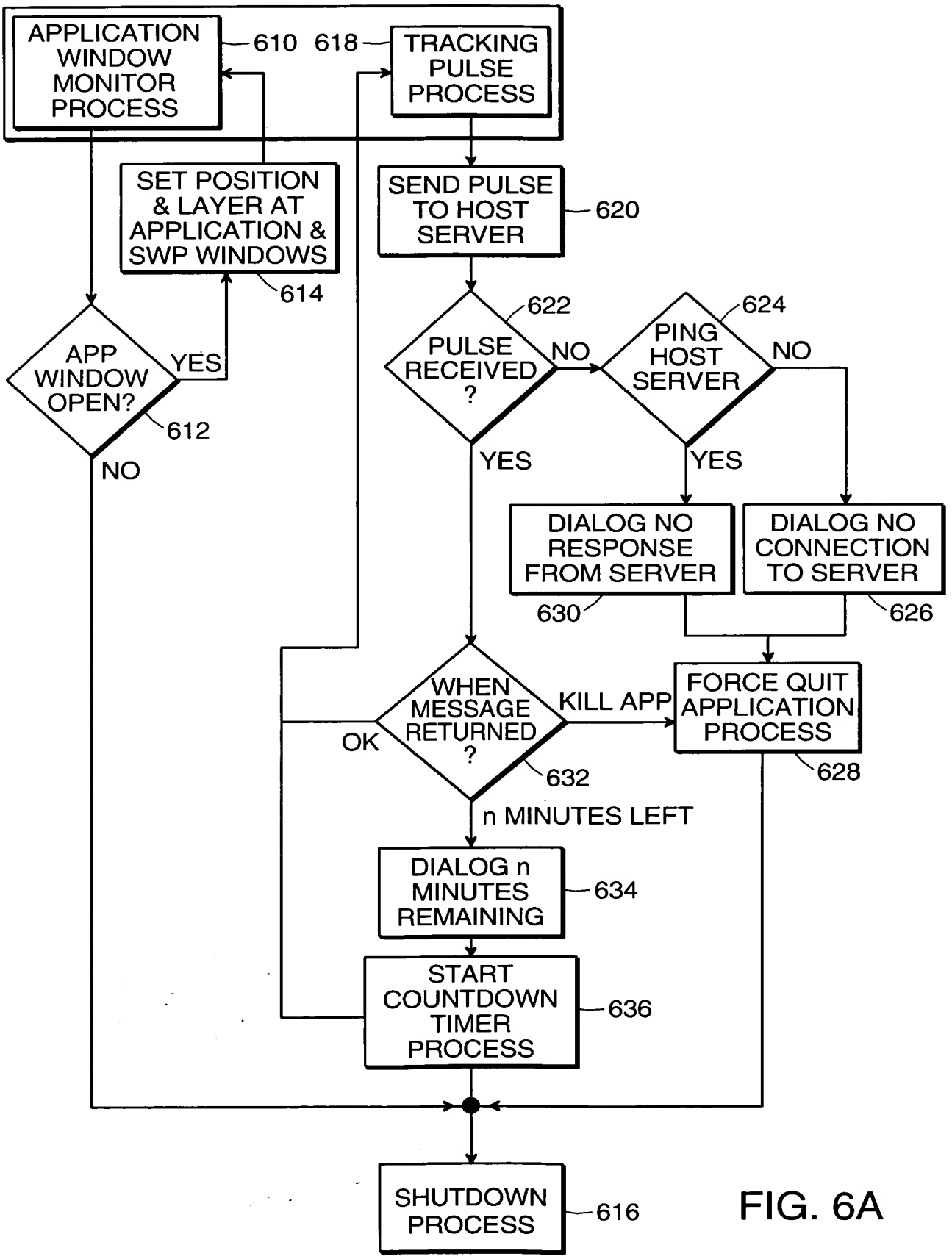

APPLICATION WINDOW MONITOR PROCESS
610
618
TRACKING PULSE PROCESS
SET POSITION & LAYER AT APPLICATION & SWP WINDOWS
614
SEND PULSE TO HOST SERVER
620
APP WINDOW OPEN?
YES
612
NO
622
PULSE RECEIVED ?
NO
624
PING HOST SERVER
NO
YES
YES
DIALOG NO RESPONSE FROM SERVER
630
DIALOG NO CONNECTION TO SERVER
626
WHEN MESSAGE RETURNED ?
KILL APP
OK
632
FORCE QUIT APPLICATION PROCESS
628
n MINUTES LEFT
DIALOG n MINUTES REMAINING
634
START COUNTDOWN TIMER PROCESS
636
SHUTDOWN PROCESS
616

FIG. 6A

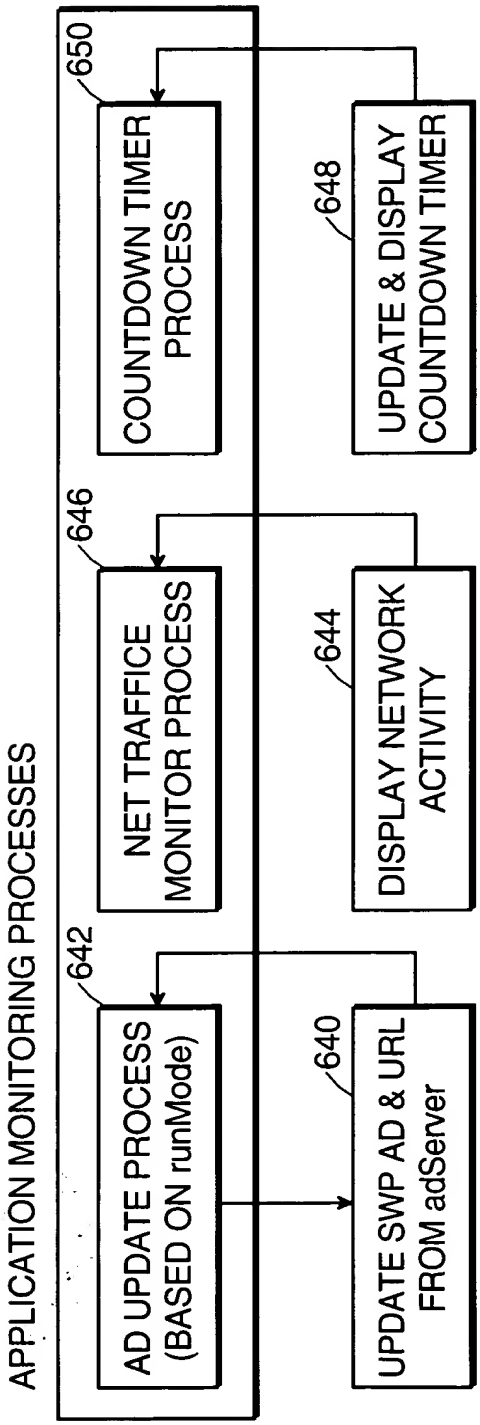

APPLICATION MONITORING PROCESSES
650
COUNTDOWN TIMER PROCESS
648
UPDATE & DISPLAY COUNTDOWN TIMER
646
NET TRAFFICE MONITOR PROCESS
644
DISPLAY NETWORK ACTIVITY
642
AD UPDATE PROCESS (BASED ON runMode)
640
UPDATE SWP AD & URL FROM adServer

FIG. 6B

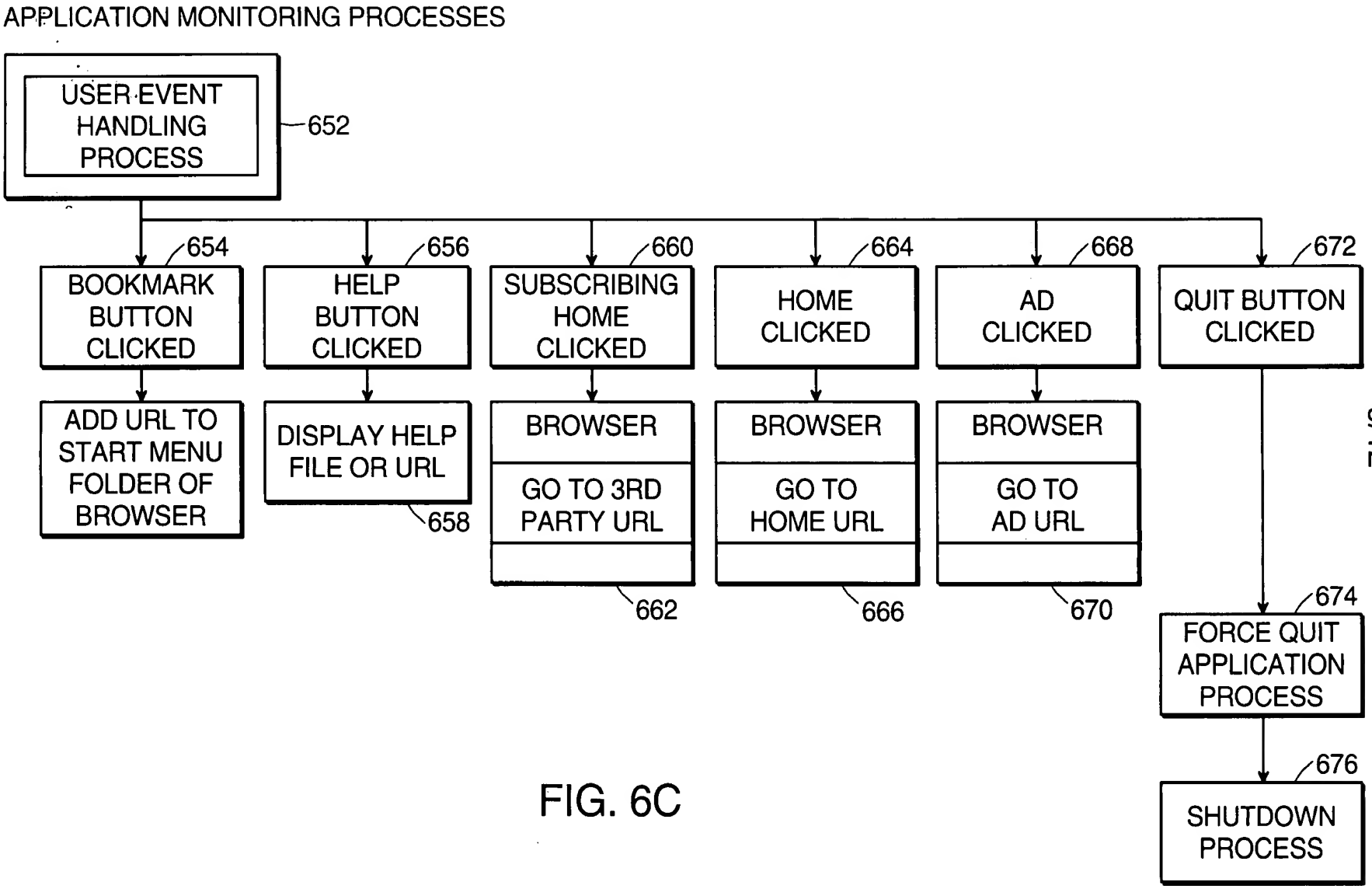

APPLICATION MONITORING PROCESSES
USER EVENT HANDLING PROCESS
652
654
BOOKMARK BUTTON CLICKED
ADD URL TO START MENU FOLDER OF BROWSER
656
HELP BUTTON CLICKED
DISPLAY HELP FILE OR URL
658
660
SUBSCRIBING HOME CLICKED
BROWSER
GO TO 3RD PARTY URL
662
664
HOME CLICKED
BROWSER
GO TO HOME URL
666
668
AD CLICKED
BROWSER
GO TO AD URL
670
672
QUIT BUTTON CLICKED
674
FORCE QUIT APPLICATION PROCESS
676
SHUTDOWN PROCESS

FIG. 6C

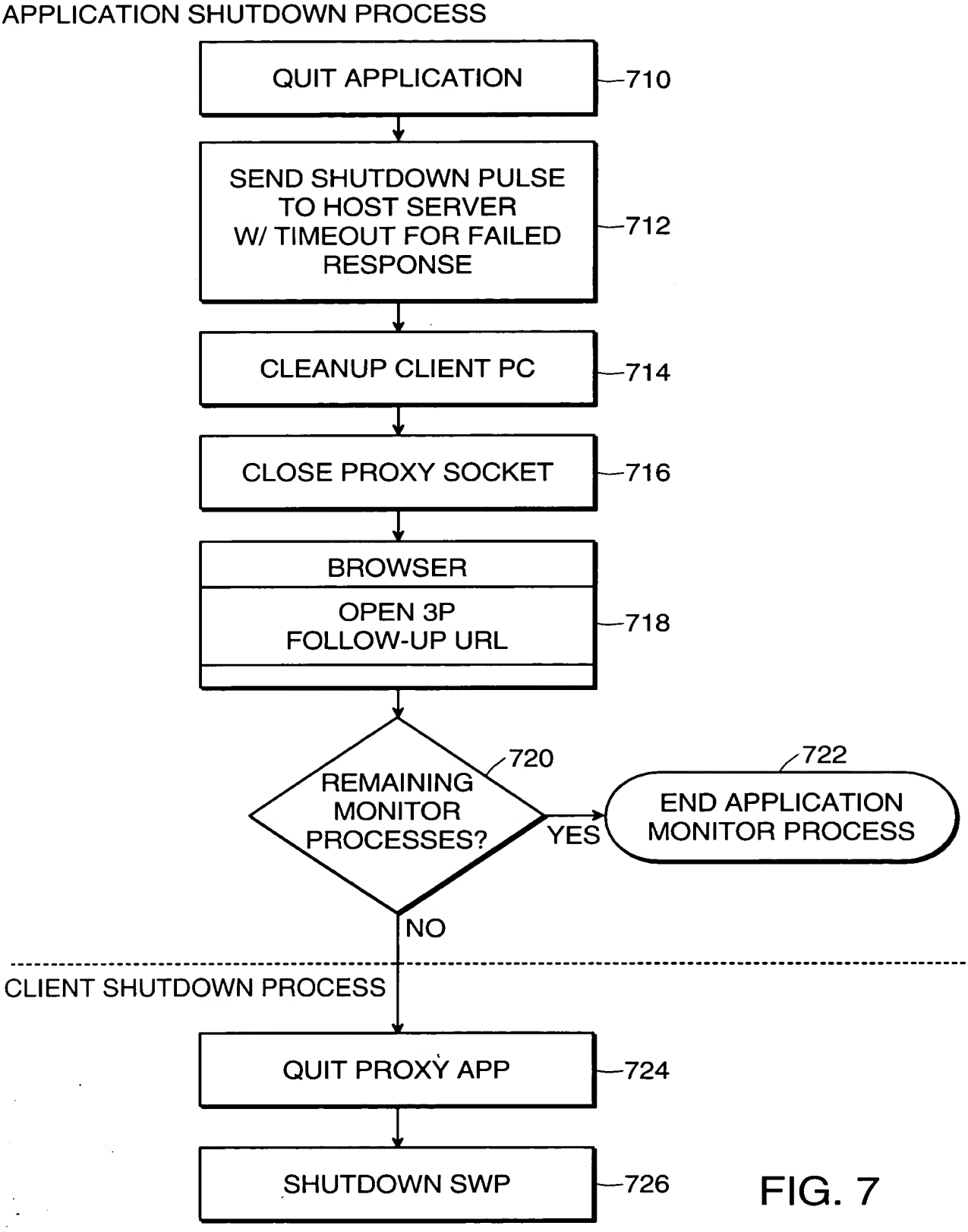

APPLICATION SHUTDOWN PROCESS
QUIT APPLICATION
710
SEND SHUTDOWN PULSE TO HOST SERVER W/ TIMEOUT FOR FAILED RESPONSE
712
CLEANUP CLIENT PC
714
CLOSE PROXY SOCKET
716
BROWSER
OPEN 3P FOLLOW-UP URL
718
REMAINING MONITOR PROCESSES?
720
YES
722
END APPLICATION MONITOR PROCESS
NO
CLIENT SHUTDOWN PROCESS
QUIT PROXY APP
724
SHUTDOWN SWP
726

FIG. 7

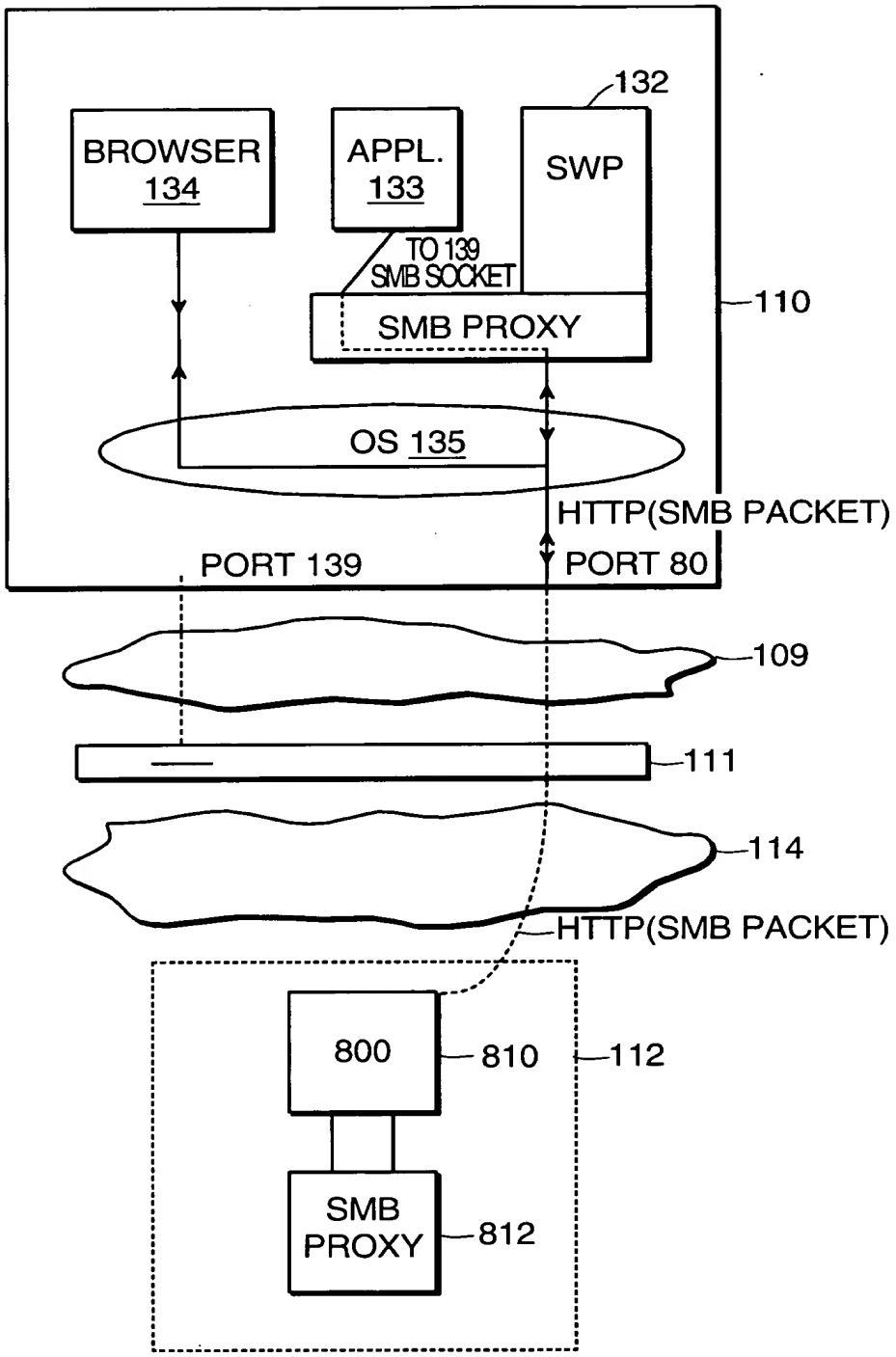

132
BROWSER
134
APPL.
133
SWP
TO 139
SMB SOCKET
SMB PROXY
110
OS 135
HTTP(SMB PACKET)
PORT 139
PORT 80
109
111
114
HTTP(SMB PACKET)
800
810
112
SMB
PROXY
812

FIG. 8

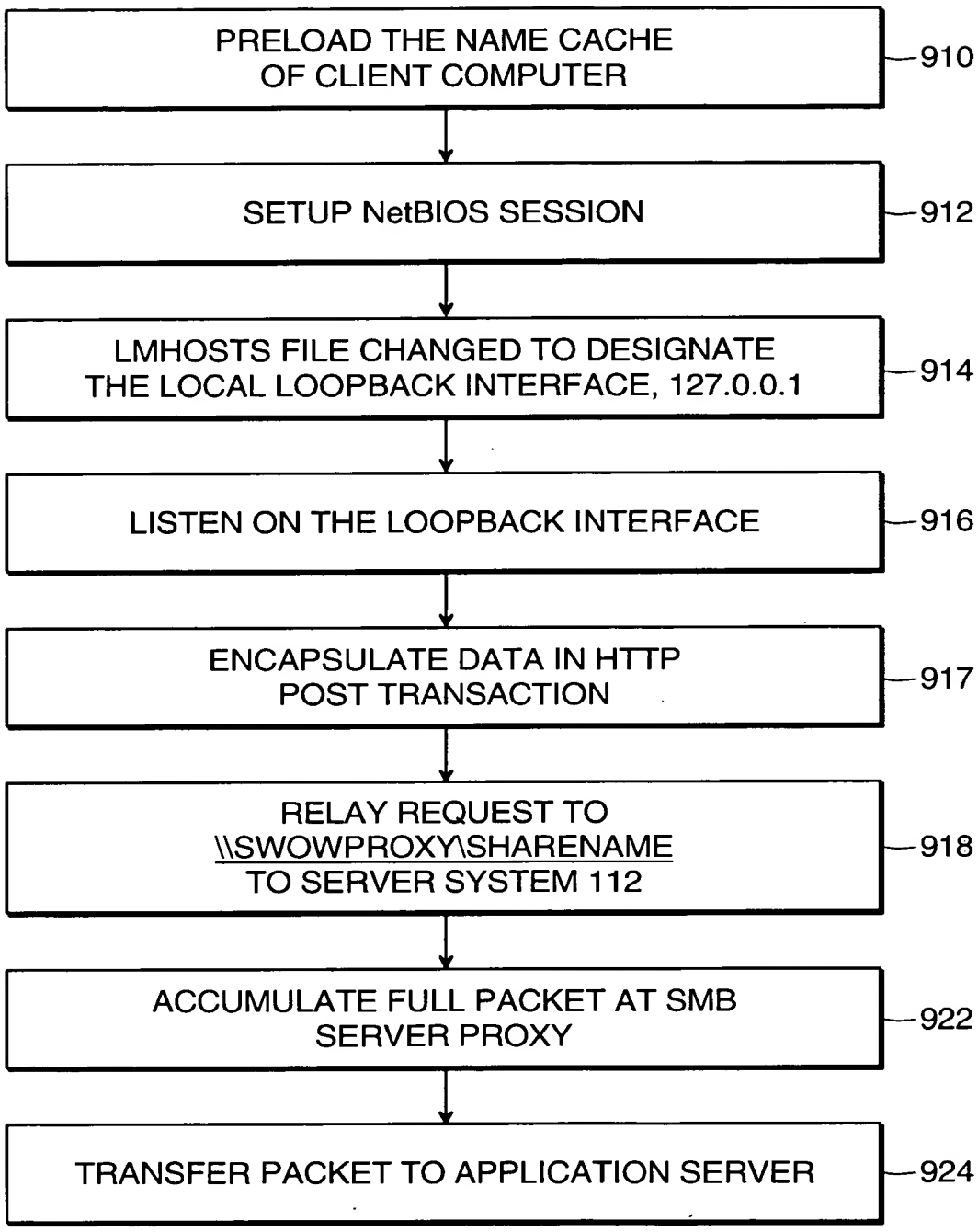

PRELOAD THE NAME CACHE OF CLIENT COMPUTER
910
SETUP NetBIOS SESSION
912
LMHOSTS FILE CHANGED TO DESIGNATE THE LOCAL LOOPBACK INTERFACE, 127.0.0.1
914
LISTEN ON THE LOOPBACK INTERFACE
916
ENCAPSULATE DATA IN HTTP POST TRANSACTION
917
RELAY REQUEST TO \\SWOWPROXY\SHARENAME TO SERVER SYSTEM 112
918
ACCUMULATE FULL PACKET AT SMB SERVER PROXY
922
TRANSFER PACKET TO APPLICATION SERVER
924

FIG. 9